

EPAUnited States Environmental Protection Agency
Washington, DC 20460**Work Assignment**

Work Assignment Number

1-31

☐ Other ☐ Amendment Number:Contract Number
EP-W-10-002

Contract Period 11/19/2009 To 11/18/2014

Title of Work Assignment/SF Site Name

Base Option Period Number 1

Evaluation Design Methodology

Contractor

INDUSTRIAL ECONOMICS, INCORPORATED

Specify Section and paragraph of Contract SOW

Element III, Section 1, para(s) 1, pages (s) 10-11

Purpose:



Work Assignment



Work Assignment Close-Out



Work Assignment Amendment



Incremental Funding



Work Plan Approval

Period of Performance

From 08/22/2011 To 11/18/2011

Comments:

The purpose of this action is to initiate Work Assignment 1-31. the Contractor shall provide a cost estimate and work plan in accordance with the contract.



Superfund

Accounting and Appropriations Data



Non-Superfund

SFO
(Max 2)

Note: To report additional accounting and appropriations data use EPA Form 1900-69A.

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

Contract Period:

11/19/2009 To 11/18/2014

Cost/Fee:

LOE:

This Action:

Total:

Work Plan / Cost Estimate Approvals

Contractor WP Dated:

Cost/Fee:

LOE:

Cumulative Approved:

Cost/Fee:

LOE:

Work Assignment Manager Name Yvonne Watson

Branch/Mail Code:

Phone Number 202-566-2239

FAX Number:

(Signature)

(Date)

Project Officer Name Cathy Turner

Branch/Mail Code:

Phone Number: 202-566-0951

FAX Number:

(Signature)

(Date)

Other Agency Official Name

Branch/Mail Code:

Phone Number:

FAX Number:

(Signature)

(Date)

Contracting Official Name Jami Rodgers

Branch/Mail Code:

Phone Number: 202-564-4781

FAX Number:

(Signature)

(Date)

Work Assignment Statement of Work

Title: Evaluation Design for a Rigorous Pilot Test of an Enforcement Targeting Strategy

Contractor: IEC, Inc.

Contract No.: EP-W-10-002

Work Assignment Number: 1-31

Phase 1:

Estimated Period of Performance: Date of issuance to November 18, 2011

Estimated Level of Effort: 145 hours

Phase 2:

Estimated Period of Performance: November 19, 2011 to November 18, 2012

Estimated Level of Effort: 145 hours

Key EPA Personnel:

Work Assignment COR (WA COR):

Yvonne M. Watson
OP/OSEM/ESD (MC1807T)
202-566-2239
202-566-2200

Contract Level COR:

Cathy Turner
CMG/OP (1805T)
202/566-0951
202/566-3001 (fax)

BACKGROUND AND PURPOSE:

Located within the Office of Policy (OP)'s Office of Strategic Environmental Management is the Evaluation Support Division (ESD). ESD's mission is to build the capacity of EPA staff and managers to conduct program evaluation activities throughout the Agency by providing technical support and training on program evaluation for EPA's national programs and regional offices. A crucial component in assessing the benefit of meeting goals, objectives, and sub-objectives is having measurable results.

As part of its effort to encourage the effective use of program evaluations throughout the Agency, ESD promotes program evaluation through a Program Evaluation Competition (PEC or Competition). This Competition is part of an ongoing, long-term effort to help build the capacity of headquarters and regional offices to evaluate activities and to improve measures of program performance. This program evaluation project was chosen for support under the current Program Evaluation Competition sponsored by OP.

In the early 1990s, Congress and the public began scrutinizing the role Federal facilities play in pollution control and abatement. Subsequently, Congress modified existing laws and

enacted new ones to clarify that all Federal facilities must comply with all national environmental laws and regulations in the same manner and degree as private facilities. However, OECA and the Federal Facility Enforcement Office (FFEO) have noticed that for the past decade, no matter how aggressive it has been in promoting enforcement, the regions' enforcement targeting strategies are unlikely to achieve significant enforcement actions from inspections at Federal facilities. This creates a perception that the uninspected Federal facility universe has a low environmental compliance rate. The nexus between insignificant enforcement actions and low environmental compliance rate is that Federal managers are less likely to comply with environmental laws and regulations if over time they fail to see a strong enforcement presence at their facilities. EPA Region 4's Office of Environmental Accountability believes it can achieve its enforcement and compliance goals in a more cost effective manner by improving and innovating the targeting phase of the enforcement process. FFEO and Region 4 are eager to explore an alternative enforcement strategy proposed by Dr. Lana Friesen, University of Queensland that will improve the inspection and compliance of federal facilities. This multi-year effort could have important implications for OECA, FFEO and other regions interested in exploring alternative enforcement targeting strategies. This proposal presents a unique opportunity to build in evaluation "up front" i.e., design the pilot program so that it produces rigorous evidence of impact.

Quality Assurance (QA) Requirements

Check [] Yes or [X] NO, if the following statement is true or false. The Contractor shall submit a written Quality Assurance Project Plan for any project that is developing environmental measurements or a Quality Assurance Supplement to the Quality Management Plan for any project which generates environmental data using models with their technical proposal.

TASKS AND DELIVERABLES:

The work assignment (WA) Contracting Officer Representative (COR) will review all deliverables in draft form and provide revisions and/or comments to the contractor. The contractor shall prepare the final deliverables incorporating the WA COR's comments.

Contractor personnel shall at all times identify themselves as Contractor employees and shall not present themselves as EPA employees. Furthermore, they shall not represent the views of the U.S. Government, EPA, or its employees. In addition, the Contractor shall not engage in inherently governmental activities, including but not limited to actual determination of EPA policy and preparation of documents on EPA letterhead.

Phase 1 Includes Task 1 and Tasks 2.

TASK 1: PREPARE WORKPLAN

The contractor shall prepare a workplan that addresses Phase 1 and 2 within 15 calendar days of receipt of a work assignment signed by the Contracting Officer (CO). The workplan shall outline, describe and include the technical approach, resources, timeline and due dates for deliverables, a detailed cost estimate by task and a staffing plan. The WA COR and the Contract Level COR and the CO will review the workplan. However, only the CO can approve/

disapprove the workplan. The contractor shall prepare a revised workplan incorporating the Contracting Officer's comments, if required.

Deliverables and Schedule Under Task 1

- | | |
|----------------------|---|
| 1a. Workplan | Within 15 calendar days of receipt of work assignment. |
| 1b. Revised workplan | Within 5 calendar days of receipt of comments from the CO, if required. |

NOTE REGARDING WORK ASSIGNMENT DELIVERABLES AND TECHNICAL DIRECTION:

The Work Assignment Contracting Officer's Representative (COR) is authorized to issue technical direction (TD) under this work assignment. The COR will follow-up all oral technical direction in writing within 5 days.

NOTE: Staff requirements for this work assignment include first-hand experience designing evaluation methodologies to establish program impact. Expert knowledge of and experience in considering probability sampling, random selection and random assignment are essential to successful performance under this work assignment.

TASK 2: EVALUATION PLANNING AND DOCUMENT REVIEW

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

- 2-1 PARTICIPATE IN CONFERENCE CALLS. The contractor shall participate in conference calls with the WA COR and other Agency staff to clarify the purpose of the evaluation effort and to exchange ideas about potential sources of information, the design of the methodology, and other pertinent matters. The COR will contact the contractor and provide a time and date for the conference calls.
- 2-2 REVIEW DOCUMENTS. The WA COR will provide the contractor with relevant links and essential documents to become familiar with the history, goals, strategy and context related to this effort. In addition, the contractor shall conduct a literature review to determine if any existing evaluations, studies or analysis have been conducted. The contractor is expected to seek out other documents for review, including those from government and non-government sources, to become familiar with all aspects of the program that are relevant to this evaluation effort. The contractor shall complete a review of these documents seven (7) calendar days after receiving them. The contractor shall also prepare and submit to the WA COR a bibliography and brief summary of the findings from the document and literature review. The contractor shall revise and update the bibliography periodically as additional literature sources are identified and reviewed.
- 2-3 ASSIST IN DEVELOPING A LOGIC MODEL. The development of a logic model is an essential tool in developing a common understanding of a program's inputs, outputs and activities. As an initial step in preparation for the evaluation, EPA began developing a logic model of its program. EPA will share the draft logic model with the contractor. Based on information gathered from the conference calls (Task 2-1) and document

review (Task 2-2), the contractor will develop and submit a draft logic model using software (e.g., Microsoft Word, Power Point) that can be manipulated/revised by EPA within 7 calendar days after receipt of the draft logic model from the WA COR. The development of the logic model is an iterative process. The contractor shall finalize the logic model within 7 calendar days after receipt of comments on draft(s) of the logic model from the WA COR.

- 2-4 **REFINE EVALUATION QUESTIONS.** EPA is providing an initial list of draft evaluation questions for use by the contractor (see below). The EPA evaluation team has identified the following key questions to provide focus to this effort. These questions, while subject to further refinement, will form the basis of the evaluation effort going forward. The overarching questions would likely remain consistent, but the specific questions and sub-questions would be subject to revision. Using this list, the information gathered in Tasks 2-1 and 2-2, and the logic model developed in Task 2-3, the contractor shall confer with the WA COR and evaluation team members to discuss and refine the evaluation questions. In preparing the refined evaluation questions, it is important that the contractor is able to clearly link the questions and program theory. The contractor shall prepare and submit to the WA COR a revised, comprehensive set of draft evaluations and sub-questions that will be the subject of this evaluation. The contractor shall finalize the draft questions 7 calendar days after receipt of comments from the WA COR via Technical Direction (TD).

Questions to be Addressed:

Outcomes

- 1) As a result of implementing the referenced enforcement targeting scheme, are enforcement compliance and violations improved?
- 2) As a result of implementing the referenced enforcement targeting scheme, do inspection cost go down?
- 3) Are there any unattended positive or negative effects of the implementation process?

Program

- 1) Is the new program implemented according to design specifications?
- 2) Are the right targeted audiences reached?

Context

What contextual factors influence the delivery or outcomes of the new intervention?

Deliverables and Schedule Under Task 2

2-1	Participate in conference	To be specified by the WA COR
2-2	Summary of Document Review	7 calendar days after receipt of documents
2-3	Finalize Logic Model	7 calendar days after receipt of draft Logic Model from WA COR
2-4a	Draft Refined Questions	7 calendar days after final meeting with WA COR
2-4b	Final Refined Questions	7 calendar days after receipt of comments

from WA COR via TD

- 2-5 **IDENTIFY PERFORMANCE MEASURES.** Using the logic model, evaluation questions and all supporting documents and information, the contractor shall meet with the EPA COR and evaluation team members via conference call to draft and refine performance measures to answer each evaluation question. Answering each evaluation question will require one or more measures. For each measure, the contractor, working with the evaluation team, should identify and clearly and concisely document (in a format easily communicated to the evaluation team and other stakeholders) primary and secondary data sources, data collection methods and strategies, the qualitative and quantitative tools and approaches for data analysis, and the details of data collection and data management. The contractor will consult with the evaluation team and other stakeholders to determine protocols for data management, access to data, and data formats to ensure appropriate and efficient sharing of information within the program and across program components, projects and stakeholders. Performance measures and all supporting information related to developing performance measures will be delivered 7 calendar days after the final meeting to discuss the measures. Final measures will be due 7 calendar days after receipt of comments from the EPA COR via TD.

Phase 2 Includes Task 3 and 4.

TASK 3: DESIGN RIGOROUS EVALUATION METHODOLOGY

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

- 3-1 **EVALUATION METHODOLOGY.** Working collaboratively to ensure that measurement and evaluation are integrated up front (before a program is implemented) is crucial for ensuring that the program will be able to attribute cause to a specific intervention. An opportunity exists to develop an evaluation methodology to enable Region 4 and FFEO to estimate the impacts directly attributable to the implementation of an innovative enforcement strategy designed by Dr. Lana Friesen, Queensland University. The contractor shall assist EPA in designing such a methodology. Based on the conference calls (2-1), the document review (Task 2-2), the final logic model (Task 2-3) and the final evaluation questions (Task 2-4) and the performance measures (Task 2-5), the contractor shall prepare a draft evaluation methodology that will be the focus of this effort.

As part of the methodology, the contractor shall document the primary and secondary data sources, collection methods, and collection strategy, appropriate qualitative and quantitative tools for analyzing data, practical issues of data collection, and a clear strategy for data documentation and management needed to answer each evaluation question. The contractor shall also document any survey instruments, survey data, survey questions, and interview/ discussion guides and protocols used in support of the evaluation as well and an approach for identifying potential interviewees. In addition, the methodology shall consider and document the sample size of any treatment and control groups, threats to internal and external validity, key performance measures, data collection instruments, information needed to establish a baseline, probability sampling for random selection and randomization for random assignment. In addition, the

contractor should identify any known confounding variables/factors to which the outcomes could be attributed.

The draft evaluation methodology shall be due **30** calendar days after the receipt of a TD from the WA COR. The final evaluation methodology will be due 7 calendar days after receipt of comments from the WA COR via TD.

Finally, this effort may require the contractor to collaborate with Dr. Lana Friesen, and other entities that have expertise and knowledge in applying these kinds of evaluation designs to environmental programs such as the Center for Evidence Based Environmental Policy and Programs based at Georgia State University.

Deliverables and Schedule Under Task 3

- | | | |
|------|-------------------|--|
| 3-1a | Draft Methodology | 30 calendar days after receipt of TD from WA COR |
| 3-1b | Final Methodology | 7 calendar days after receipt of comments via TD from WA COR |

TASK 4: REPORTS

[Contract Scope of Work Element III, Section 1, para(s) 1, page(s) (10 -11)]

- 4-1 REPORT OUTLINE. The contractor shall submit an annotated outline describing the contents of the draft and final report. This will serve as a roadmap for laying out the format of the report. This will be instrumental in organizing the format and flow of the document.
- 4-2 DRAFT REPORT. In accordance with the evaluation methodology schedule, the contractor shall submit a draft report containing, the compilation, analysis, and presentation of information developed and gathered during this effort. Specifically, the contractor shall include information obtained or developed in support of Tasks 2 and 3.
- 4-3 FINAL REPORT. The contractor shall provide a final report that reflects appropriate consideration of the Agency's comments on the draft report and of any comments received during the oral presentations. The WA COR will provide the contractor with a copy of the ESD's Report Style Guidelines. These guidelines shall be used to write all components of the evaluation report. In addition, the contractor shall use the ESD Report Cover provided by the WA COR when preparing the final report.
- 4-4 ORAL PRESENTATIONS. The contractor shall be prepared to make at least one oral presentation of the information at a date, time, and location to be specified by the WA COR in a TD. The location will most likely be Washington, D.C. The contractor shall prepare appropriate briefing materials, specifically, a power point briefing for the oral presentation.
- 4-5 FACTSHEET. The contractor shall develop a fact sheet summarizing the evaluation purpose, questions, methodology, results and recommendations. The WA COR will provide the contractor with a copy of a fact sheet template 7 calendar days after

completion of the Final Report.

Deliverables and Schedule Under Task 4

4-1	Report Outline	In accordance with the evaluation methodology schedule approved by the COR in task 2-5b.
4-2	Draft report	In accordance with the evaluation methodology schedule approved by the COR in task 2-5b.
4-3	Final report	14 calendar days after receipt of comments on the draft report and oral presentations.
4-4	Oral presentation	To be scheduled by the WA COR
4-5	Fact Sheet	7 calendar days after completion of Final Report

Table 1: Summary of Deliverables and Dates

Task	Deliverable	Due Date
Task 1 Prepare Work plan		
1a	Work plan	Within 15 calendar days of receipt of work assignment
1b	Revised work plan	Within 5 calendar days of receipt of comments from CO
Task 2 Document Review and Design Methodology		
2-1	Participate in conference calls	To be specified by the WA COR
2-2	Review of Documents/Bibliography, summary of findings	7 calendar days after receipt of documents
2-3	Finalize Logic Model	7 calendar days after receipt of draft Logic Model from WA COR
2-4a	Draft Refined Questions	7 calendar days after receipt of TD from WA COR
2-4b	Final Refined Questions	7 calendar days after receipt of comments from WA COR via TD
2-5a	Draft Performance Measures	7 calendar days after receipt of TD from WA COR
2-5b	Draft Performance Measures	7 calendar days after receipt of comments from WA COR via TD
Task 3 Evaluation Methodology		
3-1a	Draft Methodology	30 calendar days after receipt of TD from WA COR
3-1b	Final Methodology	7 calendar days after receipt of comments from WA COR
Task 4 Reports		
4-1	Report Outline	In accordance with Methodology Schedule approved in Task 3-1b
4-2	Draft Report	In accordance with Methodology Schedule approved in Task 3-1b
4-3	Final Report	14 calendar days after receipt of comments on Draft Report from WA COR
4-4	Oral Presentations	To be scheduled by the WA COR
4-5	Fact Sheet	7 calendar days after completion of Final Report